FEE TRANSMITTAL
for FY 2005

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27.

| TOTAL AMOUNT OF PAYMENT | ($) | 500.00 |

Complete if Known	
Application Number	09/960,587
Filing Date	September 21, 2001
First Named Inventor	Kirk W. Skeba
Examiner Name	Gelin, Jean Alland
Art Unit	2688
Attorney Docket No.	42390P11693

METHOD OF PAYMENT *(check all that apply)*

☒ Check ☐ Credit card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)
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FEE CALCULATION

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee ($)	Fee Code	Fee ($)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
2053	130	2053	130	Non-English specification	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
1809	790	1809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	

Other fee (specify) _____

| | SUBTOTAL (2) | ($) | 500.00 |

SUBMITTED BY				Complete (if applicable)	
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Signature				Date	04/24/06

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re the Patent Application of:	)
	)
Skeba	)
	)
Serial No.: 09/960,587	) Art Unit: 2688
	)
Filed: September 21, 2001	)
	) Examiner: Eng, George
For: A Method for Providing Certified Radio	)
Modules with a Baseband	)

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<u>APPEAL BRIEF</u>
<u>IN SUPPORT OF APPELLANT'S APPEAL</u>
<u>TO THE BOARD OF PATENT APPEALS AND INTERFERENCES</u>

Sir:

Applicant (hereinafter "Appellant") hereby submits this Brief in support of its

appeal from a final decision by the Examiner, mailed December 1, 2005, in the above-

captioned case. Appellant respectfully requests consideration of this appeal by the Board

of Patent Appeals and Interferences (hereinafter "Board") for allowance of the above-

captioned patent application.

An oral hearing is not desired.

TABLE OF CONTENTS

I.   REAL PARTY IN INTEREST

The invention is assigned to Intel Corporation, 2200 Mission College Boulevard, Santa Clara, California 95052, USA.

II.   RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision.

III.   STATUS OF THE CLAIMS

Claims 1-23 are currently pending in the above-referenced application. No claims have been allowed. Claims 1-23 are the subject of this appeal.

IV.   STATUS OF AMENDMENTS

In response to the Final Office Action, mailed on December 1, 2005, rejecting claims 1-23, Appellant filed a Response After Final under 37 C.F.R 1.116 on January 6, 2006. The Examiner mailed an Advisory Action on February 2, 2006 maintaining the rejections. In response, Appellant timely filed a Notice of Appeal on February 28, 2006.

A copy of all claims on appeal is attached hereto as an Appendix of Claims.

V. SUMMARY OF THE INVENTION

According to one embodiment, a method is disclosed. The method includes receiving a first identification (ID) at a computer system from a server via a transmission medium, comparing the first ID with a second ID stored at a first analog front end coupled to the computer system and certifying a first software-defined radio for operation if the first ID matches the second ID. See Figure 4 and Specification at paragraphs [0043] – [0046].

According to another embodiment, a computer system is disclosed. The computer system includes a first software-defined radio having a baseband unit and a first analog front-end coupled to the baseband unit. The first software-defined radio is certified for operation by authenticating a first identification (ID) received at the baseband unit with a second ID stored at the first analog front end. See Specification at paragraphs [0036] – [0040] and [0043] – [0046].

Moreover, a network is disclosed. The network includes a first client computer, a transmission medium coupled to the first client computer; and a server computer, coupled to the transmission medium. The server computer transmits first identification (ID) data to the first client computer upon receiving a request from the client computer to certify a first software-defined radio implemented at the first client computer.

In yet a further embodiment, a method is disclosed which includes receiving a request at a server computer to certify a first software-defined radio implemented at a first client computer and transmitting first identification (ID) data corresponding to the first software-defined radio to the first client computer. See Figure 4 and Specification at paragraphs [0043] – [0046].

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-4 and 7-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Souissi et al. (U.S. Patent No. 6,785,556) (hereinafter "*Souissi*") in view of Watanabe et al. (U.S. Pub. No. 2002/0144134) (hereinafter "*Watanabe*"); and

Claims 5-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Souissi* in view *Watanabe*, and further in view of Paulsen et al. (U.S. Patent No. 6,055,575) (hereinafter "*Paulsen*").

VII. ARGUMENTS

1. **THE PENDING CLAIMS WERE IMPROPERLY REJECTED UNDER 35 U.S.C. § 103(a) BECAUSE THE COMBINATION OF *SOUISSI* AND *WATANABE* DOES NOT DISCLOSE OR SUGGEST DOES NOT DISCLOSE OR SUGGEST EACH AND EVERY FEATURE OF THE PENDING CLAIMS**

Appellant respectfully submits that *Souissi* in view *Watanabe* fails to disclose or suggest the claimed invention for the reasons set forth below. As the Honorable Board is well aware, in order to establish a *prima facie* case of obviousness:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations*." (Emphasis added). *In re Vaech*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Manual of Patent Examining Procedure (MPEP), 8th Edition, Revision 2, May 2004, §2143.

(A) **Claims 1-4 and 7-19 were improperly rejected because *Souissi* in view of *Watanabe* does not disclose or suggest a certifying a first software-defined radio for operation if a first ID matches a second ID**

Claims 1-4 and 7-19 are not obvious in view of *Souissi* and *Watanabe* under 35 U.S.C. § 103(a). For example, Appellant's claim 1 recites:

> A method comprising:
> receiving a first identification (ID) at a computer system from a server via a transmission medium;
> comparing the first ID with a second ID stored at a first analog front end coupled to the computer system; and
> certifying a first software-defined radio for operation if the first ID matches the second ID.

Appellant's claim 8 recites:

> A computer system comprising a first software-defined radio including:
> a baseband unit; and
> a first analog front-end coupled to the baseband unit;
> the first software-defined radio being certified for operation by authenticating a first identification (ID) received at the baseband unit with a second ID stored at the first analog front end.

Appellant's claim 17 recites:

> A network comprising:
> a first client computer;
> a transmission medium coupled to the first client computer; and
> a server computer, coupled to the transmission medium, that transmits first identification (ID) data to the first client computer upon receiving a request from the client computer to certify a first software-defined radio implemented at the first client computer.

Souissi discloses a software configurable wireless modem that can be configured using software downloaded by a host computer. A user can select a preferred mode of operation, or mode selection can be done automatically based upon whether one or more predetermined criterion, such as a location of the modem, are met. See *Souissi* at Abstract. However, *Souissi* does not disclose or suggest a process of certifying a software radio application. In fact, the Final Office Action admits that *Souissi* does not disclose certifying a software radio. See Final Office Action at page 3, paragraph 5. Instead, the Office Action asserts that *Watanabe* discloses such a feature. Id.

Watanabe discloses a software defined radio and an approval system of a radio, which can flexibly cope with specification alteration. A software defined radio includes storage for holding transmission and reception characteristic information serving as a

specification criterion, and a control unit for comparing a measured value obtained from a measurement circuit with the information of the specification criterion and conducting setting of the radio so as to satisfy the specification. See *Watanabe* at Abstract.

Watanabe also discloses an embodiment where a server provides software to the radio. For instance, software stored at the server describes transmission and reception characteristic information, and control information for controlling a control unit of a radio so as to satisfy a specification criterion. Further, *Watanabe* discloses that the software has been approved and encrypted in a predetermined agency such that the predetermined agency conducts inspection by making the software operate in a radio configuration which represents a type of a certain radio configuration, and approves the software if the software satisfies the specification (paragraph [0056]).

Watanabe discloses another embodiment where the server creates a list of software that can be downloaded to the radio. The list includes a software ID, software version, radio configuration type, and a specification. Thus, the radio may specify a type of radio configuration and a specification criterion to be downloaded, and transmits a download request to the server. For example a user may give a specification to be downloaded and a type of a radio configuration to a control unit at the radio via a user interface. Alternatively, the server may transmit a list to the radio beforehand. The control unit of the radio selects an ID conforming to the type of its own radio configuration among specifications to be implemented after alteration from the list. The radio specifies the ID and transmits a downloading request. The control unit of the server selects the software of the requested ID and transmits the corresponding software to the radio (paragraph [0058] – [0059]).

Appellant submits that *Souissi* and *Watanabe* fail to disclose or suggest a process of comparing a first ID with a second ID stored at a first analog front end coupled to a computer system and certifying a first software-defined radio for operation if the first ID matches the second ID. In particular, *Watanabe* teaches away from certifying a software-defined radio at a computer system, as claimed in the present application since *Watanabe* discloses delivering pre-approved (i.e., pre-certified) software from a server to a radio device.

As discussed above, the system implemented in *Watanabe* is based on an assumption that the software has been approved and encrypted at a predetermined agency by making the software operate in a radio configuration which represents a type of a certain radio configuration and approving the software if the software satisfies the specification. Therefore, Watanabe cannot disclose or suggest a process of comparing a first ID with a second ID stored at a first analog front end coupled to a computer system and certifying (or approving) a first software-defined radio for operation if the first ID matches the second ID.

Since neither *Souissi* nor *Watanabe* disclose or suggest a comparing a first ID with a second ID stored at a first analog front end coupled to a computer system and certifying a first software-defined radio for operation if the first ID matches the second ID, any combination of *Souissi* and *Watanabe* would also not disclose or suggest the feature.

(B) <u>Claims 20-23 were improperly rejected because</u> <u>*Souissi* in view of *Watanabe* does not disclose or</u> <u>suggest a server computer receiving a request to</u> <u>certify a software-defined radio implemented at</u> <u>a first client computer and transmitting first</u> <u>identification (ID) data corresponding to the first</u> <u>software-defined radio to the first client</u> <u>computer</u>

Claims 20-23 are not obvious in view of *Souissi* and *Watanabe* under 35

U.S.C. § 103(a). For example, Appellant's claim 20 recites:

> A method comprising:
> <u>receiving a request at a server computer to certify a</u>
> <u>first software-defined radio implemented at a first client</u>
> <u>computer;</u> and
> transmitting first identification (ID) data
> corresponding to the first software-defined radio to the
> first client computer.

Appellant submits that nowhere in *Souissi* or *Watanabe* is there disclosed or

suggested a server computer receiving a request to certify a first software-defined radio

implemented at a first client computer and transmitting first identification (ID) data

corresponding to the first software-defined radio to the first client computer. The

Examiner asserts that:

> . . . Watanabe teaches the radio specifies the ID and
> transmits a downloading request to a server so that the
> server receives the request for certifying a first software
> defined radio ([0059]).

See Final Office Action at page 9, paragraph 7.

Appellant disagrees with the Examiner's interpretation of the *Watanabe* reference.

Appellant submits that paragraph [0059] relied on by the Examiner discloses the

transmission of a request to a server to download software corresponding to an ID

transmitted along with the request. In response, the server transmits the requested

software. Further, there is no disclosure of an ID transmitted with the software.

Consequently, *Watanabe* does not disclose or suggest a server computer receiving a request to certify a first software-defined radio implemented at a first client computer and transmitting first identification (ID) data corresponding to the first software-defined radio to the first client computer.

Since neither *Souissi* nor *Watanabe* disclose or suggest a server computer receiving a request to certify a first software-defined radio implemented at a first client computer and transmitting first identification (ID) data corresponding to the first software-defined radio to the first client computer, any combination of *Souissi* and *Watanabe* would also not disclose or suggest the feature.

Further, Appellant submits that there is no motivation provided in any of the references themselves to combine *Souissi* and *Watanabe*. Particularly, it would be impermissible hindsight based on Appellant 's own disclosure to incorporate the wireless modem in *Souissi* with the radio system in *Watanabe*. As a result, the combining of *Souissi* and *Watanabe* is not a proper combination under §103.

Consequently, the Examiner has not established a prima facie case of obviousness, and the Examiner's rejection of claims 1, 8, 17 and 20 under 35 U.S.C. §103(a) as being obvious over the combination of *Souissi* in view of *Watanabe*.

Claims 2-7 depend from claim 1, claims 9-16 depend from claim 8, claims 18 and 19 depend from claim 17 and claims 21-23 depend from claim 20. Given that dependent claims necessarily include the limitations of the claims from which they depend, Appellant submits that the invention as claimed in claims 2-7, 9-16, 18, 19 and 21-23 are similarly patentable over *Souissi* in view of *Watanabe*.

For the forgoing reasons, Appellant submits that the Examiner has failed to search and find a printed publication or patent that discloses the claimed invention as set forth in MPEP § 706.02(a).

Thus, the Examiner erred in rejecting claims 1-4 and 7-23 under 35 U.S.C. § 103(a).

2.   THE PENDING CLAIMS 5 AND 6 WERE
IMPROPERLY REJECTED UNDER 35 U.S.C. §
103(a) BECAUSE ANY COMBINATION OF *SOUISSI*,
WATANABE AND *PAULSEN* DOES NOT DISCLOSE
OR SUGGEST EACH AND EVERY FEATURE OF
THE PENDING CLAIMS

Appellant respectfully submits that the combination of *Souissi*, *Watanabe* and

Paulsen fails to disclose or suggest the claimed invention for the reasons set forth below.

(A)   **Claims 5 and 6 were improperly rejected because**
***Souissi* and *Watanabe* in view of *Paulsen* does not**
disclose or suggest a certifying a first software-defined
radio for operation if a first ID matches a second ID

Claims 5 and 6 are not obvious in view of *Souissi*, *Watanabe* and *Paulsen* under

35 U.S.C. §103(a). Claims 5 and 6 depend from independent claim 1 and necessarily

include each of the features. As discussed above, nowhere do *Souissi* and *Watanabe*

disclose or suggest each and every element of the Appellant's independent claims 1. For

example, *Souissi* and *Watanabe* fail to disclose or suggest a process of comparing a first

ID with a second ID stored at a first analog front end coupled to a computer system and

certifying a first software-defined radio for operation if the first ID matches the second

ID.

Paulsen discloses a system and method for remote users to access a private

network having a first communications protocol via a public network in a secure manner

so that the remote user appears to be connected directly to the private network and

appears to be a node on that private network. A host connected to the private network

may execute a host software application which establishes and provides a

communications path for secure access of the remote client computer. An encrypted data

stream may be communicated between the host and the client representing traffic and commands on the network. See Paulsen at Abstract.

However, *Paulsen* does not disclose or suggest a process of comparing a first ID with a second ID stored at a first analog front end coupled to a computer system and certifying a first software-defined radio for operation if the first ID matches the second ID. Since *Souissi*, *Watanabe* and *Paulsen* individually do not disclose or suggest certifying a first software-defined radio for operation, any combination of *Souissi*, *Watanabe* and *Paulsen* also would not disclose or suggest such a feature.

Moreover, Appellant submits that there is no motivation provided in any of the references themselves to combine *Souissi*, *Watanabe* and *Paulsen*. Particularly, it would be impermissible hindsight based on Appellant 's own disclosure to incorporate the wireless modem in *Souissi* with the radio system in *Watanabe*, and further combine that with the virtual private network disclosed in *Paulsen*. As a result, the combining of *Souissi*, *Watanabe* and *Paulsen* is not a proper combination under §103.

Since the combination of *Souissi*, *Watanabe* and *Paulsen* fails to disclose all of the elements required by Appellant's independent claim 1, the combination of *Souissi*, *Watanabe* and *Paulsen* fails to teach or suggest each and every element of Appellant's invention as embodied in the claims. Consequently, the Examiner has not established a prima facie case of obviousness, and the Examiner's rejection of claims 5 and 6 under 35 U.S.C. §103(a) as being obvious over *Souissi*, and *Watanabe* in view of *Paulsen* should be reversed.

VIII. CONCLUSION

Appellant respectfully submits that all the appealed claims in this application are

patentable and request that the Board of Patent Appeals and Interferences overrule the

Examiner and direct allowance of the rejected claims.

This brief is submitted, along with a check for $500.00 to cover the appeal fee for

one other than a small entity as specified in 37 C.F.R. § 1.17(c). Please charge any

shortages and credit any overpayment to out Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: April 24, 2006

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IX. APPENDIX OF CLAIMS (37 C.F.R. § 1.192(c)(9))

1   1.   A method comprising:

2   receiving a first identification (ID) at a computer system from a server via a

3   transmission medium;

4   comparing the first ID with a second ID stored at a first analog front end coupled

5   to the computer system; and

6   certifying a first software-defined radio for operation if the first ID matches the

7   second ID.

1   2.   The method of claim 1 further comprising disabling the first software-defined

2   radio if the first ID does not match the second ID.

1   3.   The method of claim 1 further comprising storing the first ID in a memory device

2   within a baseband unit at the computer system prior to comparing the first ID with the

3   second ID.

1   4.   The method of claim 1 further comprising downloading a protocol corresponding

2   with the first software-defined radio.

1   5.   The method of claim 4 wherein the first ID and the wireless protocol are received

2   as a component of a signed manifest.

1   6.   The method of claim 5 further comprising:

2   validating the signed manifest; and

3   executing the protocol at a baseband unit if the manifest is validated.

1 7.   The method of claim 1 further comprising:

2   receiving a third identification (ID) at the computer system from the server via the

3 transmission medium;

4   comparing the third ID with a fourth ID stored at a second analog front end

5 coupled to the computer system; and

6   certifying a second software-defined radio for operation if the third ID matches

7 the fourth ID.

1 8.   A computer system comprising a first software-defined radio including:

2   a baseband unit; and

3   a first analog front-end coupled to the baseband unit;

4   the first software-defined radio being certified for operation by authenticating a

5 first identification (ID) received at the baseband unit with a second ID stored at the first

6 analog front end.

1 9.)   The computer system of claim 8 further comprising:

2   an input/output (I/O) bus coupled to the baseband unit; and

3   a network controller coupled to the I/O bus.

1 10.   The computer system of claim 9 wherein the first ID is received from a server

2 computer via a transmission medium coupled to the network controller.

1 11.   The computer system of claim 10 wherein a protocol corresponding to the first

2 software-defined radio is also received from the server computer.

1 12.   The computer system of claim 9 wherein the baseband unit comprises:

2   an I/O interface coupled to the I/O bus;

3   a digital signal processor (DSP) coupled to the I/O interface; and

4   a second bus coupled to the DSP.

1   13.   The computer system of claim 12 wherein the baseband unit further comprises:

2   a volatile memory coupled to the DSP; and

3   a non-volatile memory coupled to the DSP.

1   14.   The computer system of claim 12 wherein the analog front end comprises:

2   analog-digital/digital-analog (AD/DA) conversion logic coupled to the second

3 bus;

4   modulation logic coupled to the AD/DA conversion logic;

5   a transceiver coupled to the modulation logic; and

6   an antenna coupled to the transceiver.

1   15.   The computer system of claim 14 wherein the analog front end comprises a non-

2 volatile memory that stores the second ID.

1   16.   The computer system of claim 12 further comprising a second software-defined

2 radio including:

3   the baseband unit; and

4   a second analog front-end coupled to the baseband unit;

5   the second software-defined radio being certified for operation by authenticating a

6 third ID received at the baseband unit with a fourth ID stored at the second analog front

7 end.

1 17. A network comprising:

2   a first client computer;

3   a transmission medium coupled to the first client computer; and

4   a server computer, coupled to the transmission medium, that transmits first

5 identification (ID) data to the first client computer upon receiving a request from the

6 client computer to certify a first software-defined radio implemented at the first client

7 computer.

1 18. The network of claim 17 further comprising a second client computer coupled to

2 the transmission medium, the server computer transmits the first ID data to the second

3 client computer upon receiving a request from the second client computer to certify the

4 first software-defined radio implemented at the second client computer.

1 19. The network of claim 17 wherein the server computer transmits second ID data to

2 the first client computer upon receiving a request from the first client computer to certify

3 a second software-defined radio implemented at the first client computer.

1 20. A method comprising:

2   receiving a request at a server computer to certify a first software-defined radio

3 implemented at a first client computer; and

4   transmitting first identification (ID) data corresponding to the first software-

5 defined radio to the first client computer.

1 21. The method of claim 21 further comprising transmitting a radio protocol

2 corresponding to first software-defined radio to the first client.

1 22. The method of claim 20 further comprising:

2   receiving a request at the server computer to certify the first software-defined

3 radio implemented at a second client computer; and

4   transmitting the first ID data to the second client computer.

1 23. The method of claim 20 further comprising:

2   receiving a request at the server computer to certify a second software-defined

3 radio implemented at the first client computer; and

4   transmitting second ID data corresponding to the second software-defined radio to

5 the second client computer.

X. <u>**EVIDENCE APPENDIX**</u>

None.

XI. <u>RELATED PROCEEDINGS APPENDIX</u>

None.